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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/028,153	12/20/2001	Paul T. Watson	BELL-0164/01331	3380

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EXAMINER	
BELIVEAU, SCOTT E	
ART UNIT	**PAPER NUMBER**
2614	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/028,153	WATSON ET AL.	
	Examiner	Art Unit	
	Scott Beliveau	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 26 April 2005 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 6-8, 14-16, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Ellis et al. (WO 99/60790 A1).

In consideration of claims 1 and 6, the Ellis et al. reference discloses a system implemented "method" for "content transmission network selection" in conjunction with the delivery of video-on-demand programming. As illustrated in Figure 2, the system comprises

a video server [29] that controls and coordinate the routing and delivery of selected programming to the requestor's location (Page 11, Lines 7-19). The method by which programming is delivered comprises "identifying video program content to be transmitted based on at least one transmission request" (Page 22, Line 18 – Page 23, Line 16) whereupon the system "determines whether to transmit the video programming content using a broadcast network [comprising one of a . . . cable network [32]] . . . based upon characteristics of the transmission request comprising a future time at which the video programming content is requested to be viewed . . [and] at least in part on an option of delivering the video programming content either at a time that the request is received" (ex. start/view now) or "at the future time" (Page 23, Line 17 – Page 24, Line 10). For example, in response to the user's request for a program the system subsequently determines to send the program based upon availability to the user using the available cable network [32]. The alternative language of the claim 1 does not require that the determination involves an active comparison between a plurality of available networks or distribution paths. The system subsequently "transmits the video programming content on one of the broadcast network" [32] or "cable network" for reception of the program by the user (Page 2, Lines 3-16; Page 11, Lines 7-19; Page 25, Lines 28-32).

In consideration of claims 1 and 7, the Ellis et al. reference discloses a system implemented "method" for "content transmission network selection" in conjunction with the delivery of video-on-demand programming. As illustrated in Figure 2, the system comprises a video server [29] that controls and coordinate the routing and delivery of selected programming to the requestor's location (Page 11, Lines 7-19). The method by which

programming is delivered comprises "identifying video program content to be transmitted based on at least one transmission request" (Page 22, Line 18 – Page 23, Line 16) whereupon the system "determines whether to transmit the video programming content using a broadband network [comprising one of a . . . cable network [32]] . . . based upon characteristics of the transmission request comprising a future time at which the video programming content is requested to be viewed . . [and] at least in part on an option of delivering the video programming content either at a time that the request is received" (ex. start/view now) or "at the future time" (Page 23, Line 17 – Page 24, Line 10). For example, in response to the user's request for a program the system subsequently determines to send the program based upon availability to the user using the available cable network [32]. The alternative language of the claim 1 does not require that the determination involves an active comparison between a plurality of available networks or distribution paths. The system subsequently "transmits the video programming content on one of the broadband network" [32] or "cable network" for reception of the program by the user (Page 2, Lines 3-16; Page 11, Lines 7-19; Page 25, Lines 28-32).

Claim 2 is rejected wherein the "step of identifying content to be transmitted based on at least one transmission request comprises transmitting a list of available content items over a broadband network" or cable network and "receiving from a broadband network requests for content items" in connection with ordering the requested video-programs (Page 13, Line 7 – Page 14, Line 4).

Claim 8 is rejected wherein "said characteristics of the transmission request further comprise at least one of . . . a dollar amount the viewer is willing to pay for the content" (Page 23, Lines 3-16; Page 24, Lines 4-10).

In consideration of claims 14 and 15, the Ellis et al. reference discloses that the "step of transmitting the content on one of the broadcast network . . . comprises transmitting the content on one of the broadcast network . . . at a time prior to the future time at which the content is requested to be viewed" and comprises "transmitting the content on one of the broadcast network . . . at the future time at which the content is requested to be viewed" (Page 24, Lines 4-10). For example, a requested video program may be partially sent prior to the start time at which point the remaining portion of the video program must be sent at the requested future time in order to enable the viewer to watch the entire presentation.

In consideration of claims 16 and 19, the Ellis et al. reference discloses a "system" for implementing a method using a "computer readable medium having stored thereon computer readable instructions" for "content transmission network selection" in conjunction with the delivery of video-on-demand programming. As illustrated in Figure 2, the system comprises a "processor" [29] or video server implicitly comprising a "memory having stored therein computer executable instructions" so as to control and coordinate the routing and delivery of selected programming to the requestor's location (Page 11, Lines 7-19). The method by which programming is delivered comprises "identifying video program content to be transmitted based on at least one transmission request" (Page 22, Line 18 – Page 23, Line 16) whereupon the system "determines whether to transmit the video programming content using a broadcast network . . . based upon characteristics of the transmission request comprising a

future time at which the video programming content is requested to be viewed . . [and] at least in part on an option of delivering the video programming content either at a time that the request is received" (ex. start/view now) or "at the future time" (Page 23, Line 17 – Page 24, Line 10). For example, in response to the user's request for a program the system subsequently determines to send the program based upon availability to the user using the available cable network [32]. The alternative language of the claim 1 does not require that the determination involves an active comparison between a plurality of available networks or distribution paths. The system subsequently "transmits the video programming content on one of the broadcast network" [32] for reception of the program by the user (Page 2, Lines 3-16; Page 11, Lines 7-19; Page 25, Lines 28-32).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the

time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 12, 13, 18, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. (WO 99/60790 A1) in view Lawler et al. (US Pat No. 5,699,107)

In consideration of claims 12, 13, 18, and 21, the Ellis et al. reference discloses providing the user with a reminder message including a "notification of the transmission characteristics . . . including [the] time of transmission" of requested video program (Page 25, Line 28 – Page 26, Line 10). The reference, however, is silent with respect to whether or not this message is generated locally or remotely such that the "notification" is "transmitted over a broadcast network". In a related art pertaining to interactive video distribution systems, the Lawler et al. reference provides evidence that it is known and preferable to transmit "notifications" associated with reminders "over a broadcast network" [14] (Col 12, Lines 16-43). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to utilize the remote "notification" distribution teachings of Lawler et al. in connection with the reminder notification of Ellis et al. for the purpose of advantageously providing a centralized means to store and distribute "notifications".

8. Claims 9-11 and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. (WO 99/60790 A1) in view Rai et al. (US Pat No. 6,438,110).

In consideration of claims 9-11 and 22-24, weight is given to the existence of both the "broadcast network" or "broadband network" such that determining is further based upon "at least one of . . . characteristics of the content to be transmitted, characteristics of the broadcast network and characteristics of the broadband network".

As aforementioned, the Ellis et al. reference discloses a "system" for implementing a "method" using a "computer readable medium having stored thereon computer readable instructions" for "content transmission network selection" in conjunction with the delivery of video-on-demand programming. As illustrated in Figure 2, the system comprises a "processor" [29] or video server implicitly comprising a "memory having stored therein computer executable instructions" so as to control and coordinate the routing and delivery of selected programming to the requestor's location (Page 11, Lines 7-19). The method by which programming is delivered comprises "identifying video program content to be transmitted based on at least one transmission request" (Page 22, Line 18 – Page 23, Line 16) whereupon the system "determines whether to transmit the video programming content . . . based upon characteristics of the transmission request comprising a future time at which the video programming content is requested to be viewed . . [and] at least in part on an option of delivering the video programming content either at a time that the request is received" (ex. start/view now) or "at the future time" (Page 23, Line 17 – Page 24, Line 10). The system subsequently "transmits the video programming content" for reception of the program by the user (Page 2, Lines 3-16; Page 11, Lines 7-19; Page 25, Lines 28-32). While the Ellis et al. reference suggests the existence of multiple distribution paths/networks [32] (Page 13, Line 25 – Page 14, Line 30), the reference is unclear that a determination is made as to which of the networks/links to utilize based upon characteristics of the networks or the content to be transmitted.

In a related art pertaining to heterogeneous network determination for the delivery of information over a plurality of networks, the Rai et al. reference discloses making a

determination so as to utilize a "broadcast network or a broadband network based upon characteristics of the transmission request comprising a future time" and "at least one of the . . . characteristics of the content to be transmitted . . . " wherein the "characteristics of the content to be transmitted comprise at least one of . . . duration of the content" (Rai et al.: Figures 2-3; Col 5, Lines 48-61; Col 6, Line 30 – Col 7, Line 6; Col 7, Line 35 – Col 8, Line 11). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify Ellis et al. so as to further utilize the network determination functionality of Rai et al. for the purpose of providing a means by which to advantageously manage and allocate resources in a communication network comprising a plurality of links or "networks" for scheduled events in order to ensure the high-quality delivery of services (Rai et al.: Col 1, Line 34 – Col 2, Line 6).

9. Claims 3-5, 17, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. (WO 99/60790 A1), in view Rai et al. (US Pat No. 6,438,110), and in further view of Kaplan et al. (US Pat No. 6,016,307).

In consideration of claims 3-5, 17 and 20, the Rai et al. reference in conjunction with determining which network to utilize for content distribution "determines whether there is sufficient available bandwidth in the broadcast network; and if there is not sufficient available bandwidth in the broadcast network . . . determines to transmit the content over a broadband network". The step of "determining whether there is sufficient available bandwidth in the broadcast network to transmit the content comprises the steps of determining the available bandwidth in the broadcast network, determining the minimum transfer rate for the content; determining whether the minimum transfer rate of the content

exceeds the available bandwidth in the broadcast network" wherein "if the minimum transfer rate for the content exceeds the available bandwidth in the broadcast network, then determining that there is not sufficient available bandwidth in the broadcast network to transmit the content and if the minimum transfer rate for the content does not exceed the available bandwidth in the broadcast network, then determining that there is sufficient available bandwidth in the broadcast network to transmit the content" (Rai et al.: Figure 11; Col 7, Lines 48-65).

In connection with the determination of which network link to utilize, the Rai et al. reference is silent with respect to the concept of transmission costs being used in conjunction with routing decisions. In a related art pertaining to the selection of a content transmission network, the Kaplan et al. reference teaches discloses the particular usage transmission costs in addition to other factors should be utilized in connection with making routing decisions between various networks. In particular, the Kaplan et al. reference discloses that the particular decision as to which network to utilize may be based on a number of factors. These factors include "determining available bandwidth" and a comparison between the "cost of transmitting content" between a "broadband" or "broadcast network" whereupon should the "cost of transmitting the content" over one network not exceed the other then the less expensive network is selected all other factors being equal (Kaplan et al.: Col 1, Line 18-27; Col 3, Line 59 – Col 4, Line 12). The determination of the "cost of transmitting the content" on the basis of "determining a cost of transmission per unit of data", "determining the total number of units of data in the content" and subsequently calculating the "product of the total number of units of data in the content and cost of transmission per unit of data" of

one network versus another in order to determine "if the product . . [or total cost of transmission] of data over the broadcast network exceeds the product . . . [or total cost of transmission] of data over the broadband network" (Kaplan et al.: Col 4, Line 12 – Col 7, Line 44). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to modify the Rai et al. routing algorithm with the cost analysis teachings of Kaplan et al. for the purpose of advantageously utilizing a plurality of parameters in addition to cost in order to arrive at the optimal routing of data through a network (Kaplan et al.: Col 1, Line 61 – Col 2, Line 15).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows. Applicant is reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made.

- The Carr et al. (US Pat No. 5,608,446) reference discloses a data distribution apparatus which makes a determination as to whether or not to distribute material using a high or a low bandwidth channel.
- The Jacobson et al. (US Pat No. 6,426,959) reference discloses a system and method for making routing decisions using heterogeneous networks.
- The Gibbings (US Pat No. 6,885,675) reference discloses an apparatus for asymmetric routing between high and low bandwidth paths.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Beliveau whose telephone number is 571-272-7343. The examiner can normally be reached on Monday-Friday from 8:30 a.m. - 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SEB
July 21, 2005